

# Part 573 Safety Recall Report

# 16V-430

**Manufacturer Name :** Nissan North America, Inc.

**Submission Date :** JUN 10, 2016

**NHTSA Recall No. :** 16V-430

**Manufacturer Recall No. :** NR



## Manufacturer Information :

**Manufacturer Name :** Nissan North America, Inc.

**Address :** P. O. BOX 685001  
Franklin TN 37068-5009

**Company phone :** 800-647-7261

## Population :

**Number of potentially involved :** 28,182

**Estimated percentage with defect :** 100 %

## Vehicle Information :

**Vehicle 1 :** 2014-2016 Infiniti Q50

**Vehicle Type :** LIGHT VEHICLES

**Body Style :** 4-DOOR

**Power Train :** GAS

**Descriptive Information :** This issue is specific to Q50 models equipped with optional Direct Adaptive Steering (described in Section 5 below) manufactured during the subject time period. No other Nissan or Infiniti vehicles are equipped with DAS.

**Production Dates :** DEC 26, 2012 - DEC 11, 2015

**VIN Range 1 : Begin :** NR

**End :** NR

☐ Not sequential

**Vehicle 2 :** 2014-2016 Infiniti Q50 Hybrid

**Vehicle Type :** LIGHT VEHICLES

**Body Style :** 4-DOOR

**Power Train :** HYBRID ELECTRIC

**Descriptive Information :** This issue is specific to Q50 models equipped with optional Direct Adaptive Steering (described in Section 5 below) manufactured during the subject time period. No other Nissan or Infiniti vehicles are equipped with DAS.

**Production Dates :** DEC 10, 2012 - DEC 17, 2015

**VIN Range 1 : Begin :** NR

**End :** NR

☐ Not sequential

## Description of Defect :

**Description of the Defect :** The subject vehicles are equipped with an optional DAS (steer-by-wire) system. During normal operation, the amount of electrical current delivered to the steering actuator motors is designed to vary based on ambient temperatures. Under certain rare conditions, a combination of low battery voltage at engine start up (~7 volts), combined with a large steering angle when the vehicle is parked (customer parks the car with wheels turned) can

cause an immediate error in the steering ratio calculation algorithm at vehicle startup; which may lead to a noticeable change in steering responsiveness and turning radius.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If this issue occurs, the steering wheel is noticeably off-center and the “VDC warning lamp” telltale illuminates to warn the driver. If these warnings are ignored, and the vehicle is driven in this condition, it could increase the risk of a crash.

Description of the Cause : NR

Identification of Any Warning that can Occur : NR

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR  
NR

Country : NR

## Chronology :

October 2015 – Nissan received a technical report concerning a vehicle that exhibited the subject condition, where the steering was visibly “off center” after vehicle start up. The issue was reviewed and a software improvement opportunity was identified. There were no additional known incidents involving the subject condition in the U.S. market.

December 2015 – While Nissan did not believe the subject condition was a safety defect, Nissan implemented a production software update.

April 2016 to May 2016 – Nissan received a second technical report potentially attributable to the subject condition. Nissan began to assess the subject condition, which included dynamic testing. More specifically, a vehicle performance test was conducted and the results showed that if the voltage was low (~7 volts) and the vehicle steering angle was large at the time the customer shut off the vehicle, the neutral steering position may be changed at vehicle start up. If this occurred, the “VDC warning lamp” would illuminate to alert the customer of the issue.

June 2, 2016 – While Nissan is aware of only one additional incident attributable to this issue, there is sufficient visual warning to the customer; out of an abundance of caution, Nissan decided to conduct a Safety Recall Campaign and is reporting in accordance with the defect notification requirements specified in 49 CFR Part 573.

## Description of Remedy :

**Description of Remedy Program :** Infiniti retailers will reprogram the Direct Adaptive Steering ECU with the improved software to prevent this issue from occurring. This service will be provided at no cost to the customer.

We will not include a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy as the subject vehicles are under warranty.

**How Remedy Component Differs from Recalled Component :** NR

**Identify How/When Recall Condition was Corrected in Production :** NR

## Recall Schedule :

**Description of Recall Schedule :** Nissan plans to notify dealers on June 9 and will notify all affected owners within 60 days of DIR submission to bring their vehicle into an Infiniti retailer.

**Planned Dealer Notification Date :** JUN 09, 2016 - NR

**Planned Owner Notification Date :** NR - NR

\* NR - Not Reported